



# Indiana's 2016 Draft 303(d) List of Impaired Waters

Presentation to the Indiana Environmental Rules Board  
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# Clean Water Act (CWA)

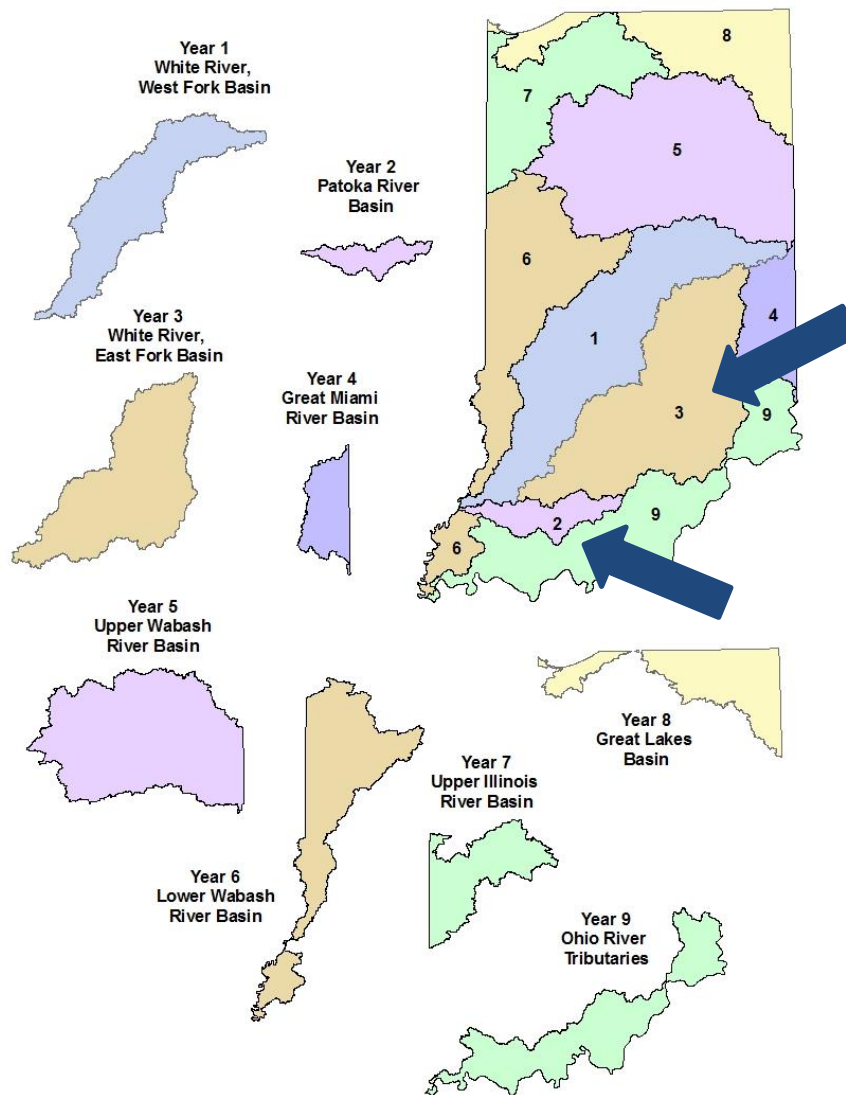
## Sections 305(b) and 303(d)

- 305(b) requires states to:
  - Assess how well our waters are supporting designated uses identified in our water quality standards (WQS)
  - Report our assessments to the U.S. Environmental Protection Agency (U.S. EPA)
- 303(d) requires states to submit a list of impaired waters to U.S. EPA
- Both are combined into the Integrated Report (IR) submitted every two years

# IDEM's Approach to Monitoring, Assessment and Reporting

- It all starts with data collection
- IDEM monitors Indiana waters using two approaches
  - Probabilistic monitoring through rotating basins
  - Targeted monitoring (includes fixed stations)
- IDEM also looks for data collected by others

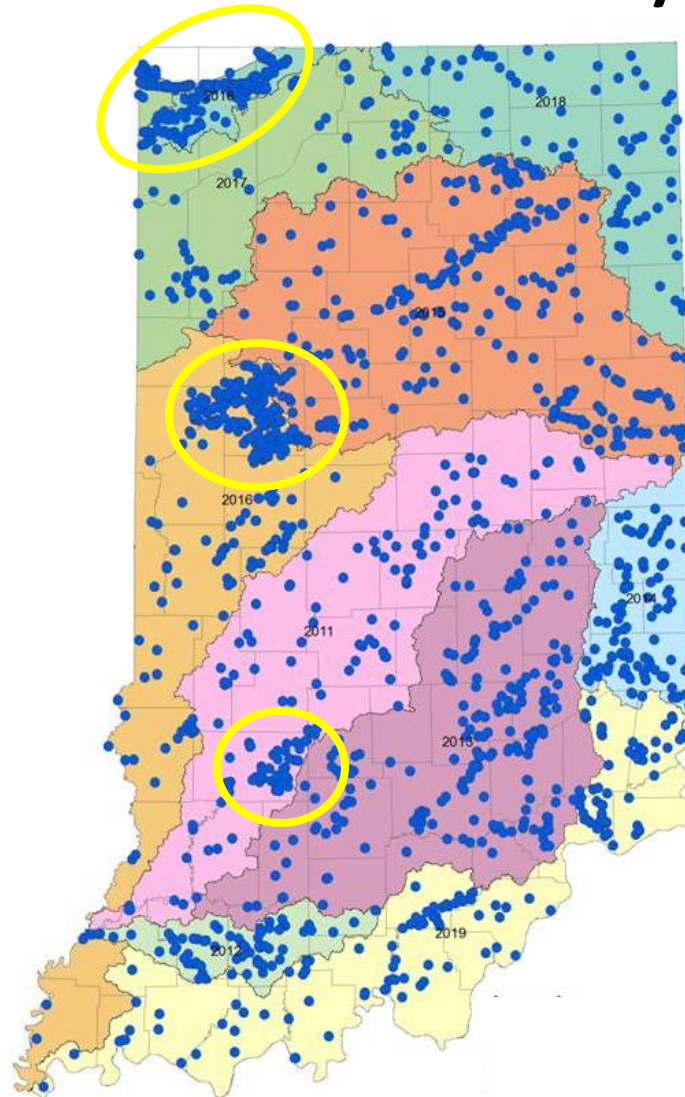
# Rotating Basin Approach



# IDEM's Monitoring, Assessment, and Listing Schedule

BASIN	BASIN(S)	MONITORED	ASSESSED	IR and 303(d)
2	Patoka River	2012	2014	2016
3	White River, East Fork	2013	2015	
4	Great Miami River (Whitewater)	2014	2016	2018
5	Upper Wabash River	2015	2017	
6	Lower Wabash River	2016	2018	2020
7	Upper Illinois River (Kankakee, Iroquois)	2017	2019	

# Sites Monitored by IDEM



# IDEM's Water Quality Assessments

- Based on narrative and numeric criteria expressed in Indiana's WQS
- Designated Use Support Assessments
  - Recreational Use
  - Aquatic Life Use
  - Public Water Supply
- Other types of assessments
  - Fish Tissue
  - Lake Trends and Trophic State

# IDEM's Consolidated Assessment and Listing Methodology (CALM)

- Describes IDEM's water quality assessment criteria and how they are applied
- Describes how IDEM decides to add or remove waterbodies from the 303(d) list
- A living document that evolves with new science and U.S. EPA policy
  - No significant changes for the 2016 cycle
  - New methods for assessments of public water supply proposed for 2018



# IDEM's Assessment Infrastructure

- The Reach Index
  - An “address book” for all the lakes and streams in Indiana
    - Every waterbody in the state has a unique assessment unit (AU) identification number
    - These “addresses” allow us to show assessment information on a map
- The Assessment Database (ADB)
  - Allows us to track all the information we have for each waterbody by associating it with that waterbody's AU identification number
    - Assessments are cumulative, providing a history for each waterbody

# IDEM's Consolidated List and 303(d) List

- The Consolidated List
  - A summary of everything we know about how well each waterbody AU is supporting its designated uses
- The 303(d) list
  - A *subset* of the Consolidated List – those waters not supporting one or more uses
  - Waters that require a total maximum daily load (TMDL)

# Categories in the Consolidated List

Category 1 – All designated uses have been assessed and are fully supported

Category 2 – The use has been assessed, it's fully supported and no other uses are impaired

Category 3 – Not enough data or information to determine if the use is supported

Category 4 – The use is impaired but a TMDL is not required

Category 5 – The use is impaired and a TMDL is required

# Development of the Consolidated and 303(d) Lists

1. Compile the data and conduct assessments based on the CALM
2. Enter assessment decisions into the ADB
3. Query the ADB for all assessments to date
4. For each AU, determine the Consolidated List category that best describes how well it supports each designated use
5. Copy out Category 5 for the 303(d) list

# Requirements for Delisting

- New data indicate WQS are now being met
- The AU no longer considered impaired based on changes in assessment or listing methods
- The AU no longer considered impaired based on error in the original assessment or listing
- A TMDL won't solve the problem
  - Better ways than a TMDL to address it
  - Problem not caused by a pollutant
- The TMDL is approved

# U.S. EPA Approval of Indiana's 303(d) List

- IDEM received partial approval of its 2010 303(d) list on May 8, 2013
- At issue:
  - IDEM's decision to use dissolved as opposed to total metals when making aquatic life use assessments and listing decisions
  - IDEM's position regarding the use of derived criteria (Tier I and Tier II values)
- These issues remain unresolved

# U.S. EPA Approval of Indiana's 303(d) List

- 2012 303(d) list submitted with the IR on March 30, 2012
- Revised 303(d) list submitted as addendum to the 2012 IR on December 28, 2012
- 2014 303(d) list submitted with the IR on April 1, 2014
- Revised 303(d) list submitted as addendum to the 2014 IR on September 25, 2015

# Our Work Continues

- IDEM continues to conduct water quality assessments and remains committed to continued reporting results to the public
- Each 303(d) list builds on the previous list to include the most up-to-date assessment information



# Moving Forward

- To develop the 2012 303(d) list, IDEM used the approved portion of the 2010 303(d) list as a starting point
  - The 2012 303(d) list submitted to U.S. EPA did not include the impairments still at issue
- IDEM used its finalized 303(d) for 2012 to develop the draft list for 2014
- To develop the 2016 draft list, IDEM used its finalized 303(d) list for 2014

# Public Comment Period Underway

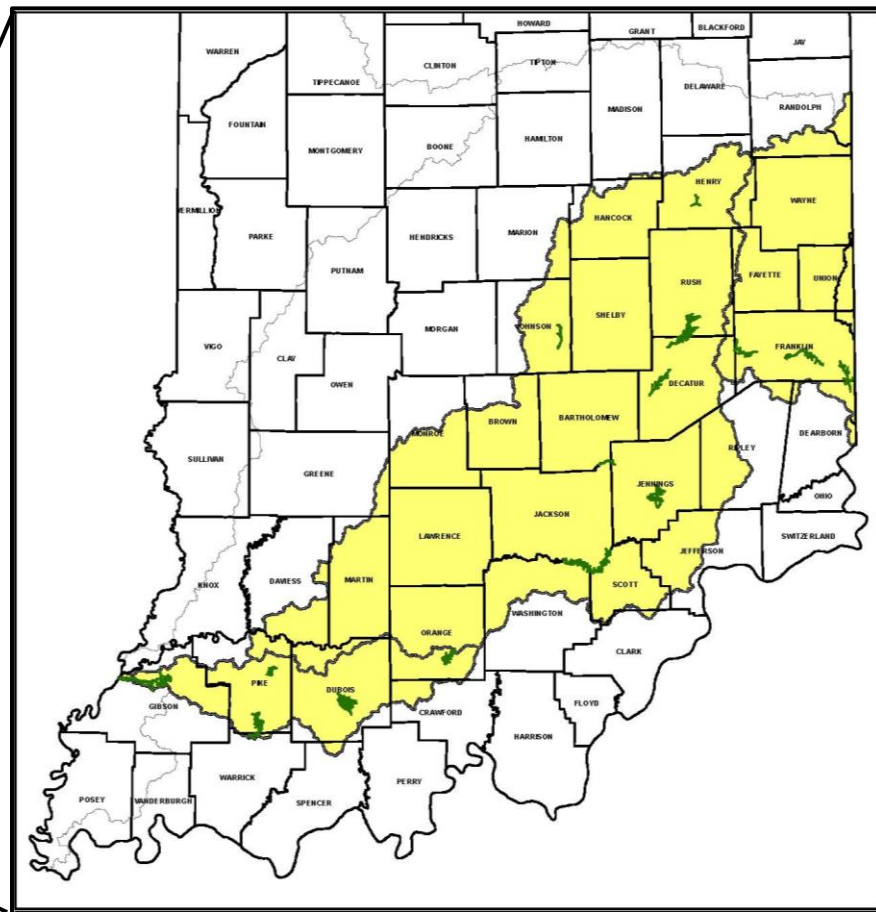
- April 6 to July 5, 2016
- IDEM submitted its IR, including the draft 2016 303(d) list to U.S. EPA on April 1 this year
- All public comments received during the public comment period and IDEM's responses will be submitted to U.S. EPA as an addendum to the 2016 IR
  - Will include a revised, finalized 303(d) list for 2016

# Impairments Removed from Indiana's Draft 303(d) List for 2016

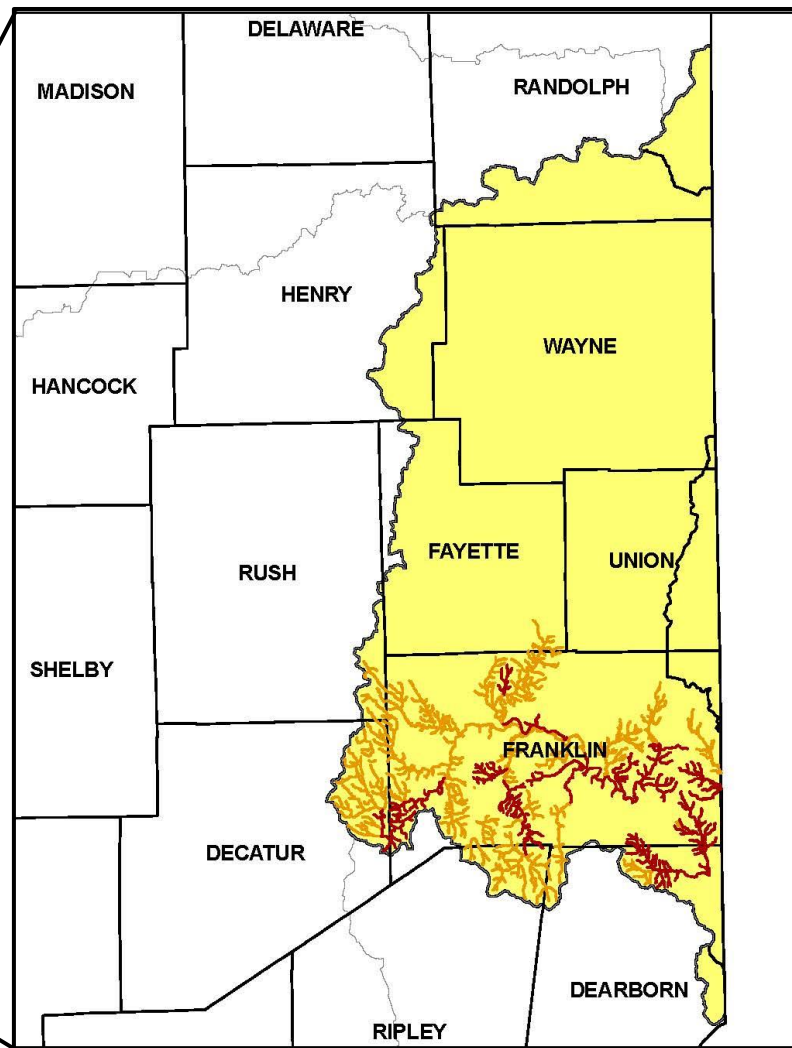
Impairments removed from Category 5 based new information indicating the applicable WQS are now met	23
Impairments moved from Category 5 to Category 4A based on TMDL development*	22
Total Number of Delistings	45

\*Doesn't include another 64 impairments identified through the TMDL process

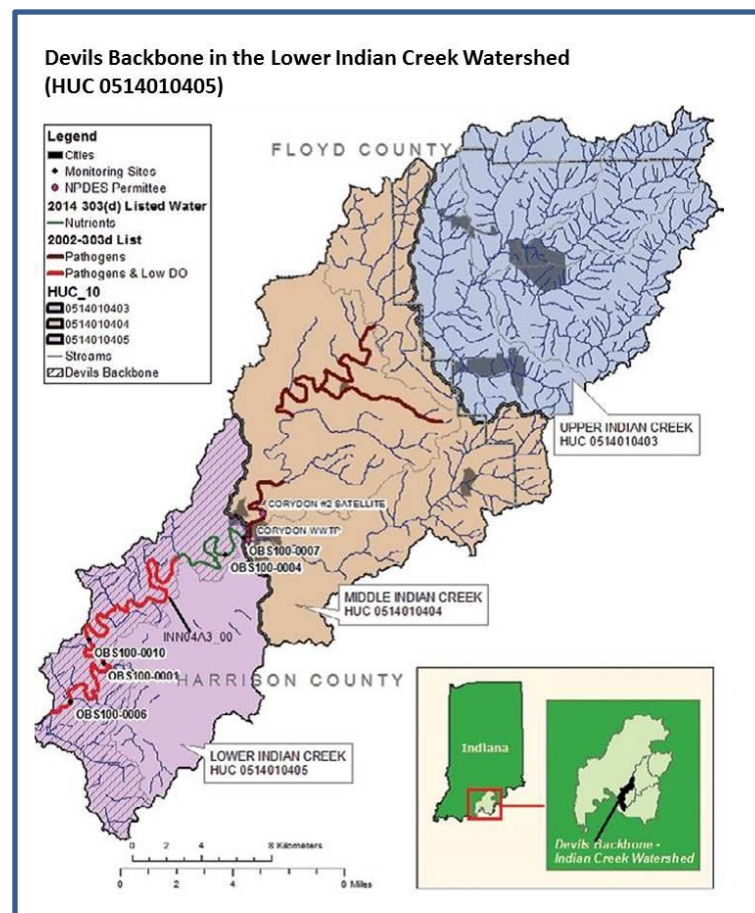
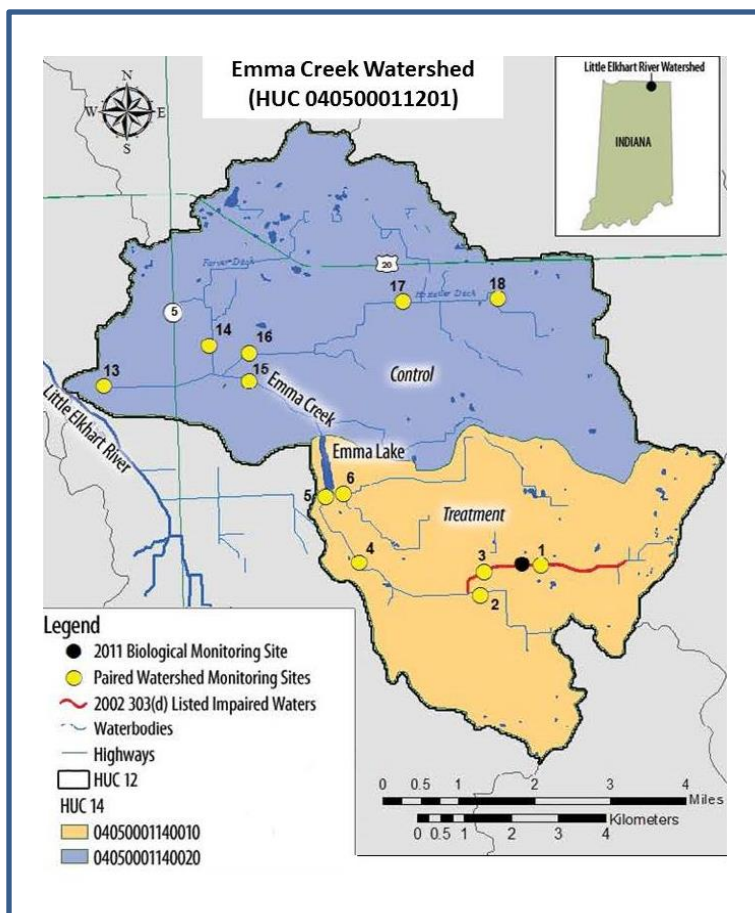
# Impairments Delisted Based on Water Quality Improvements



# Impairments Moved to Category 4A Based on TMDL Development



# Other Improvements in Water Quality (IDEM's Success Stories)

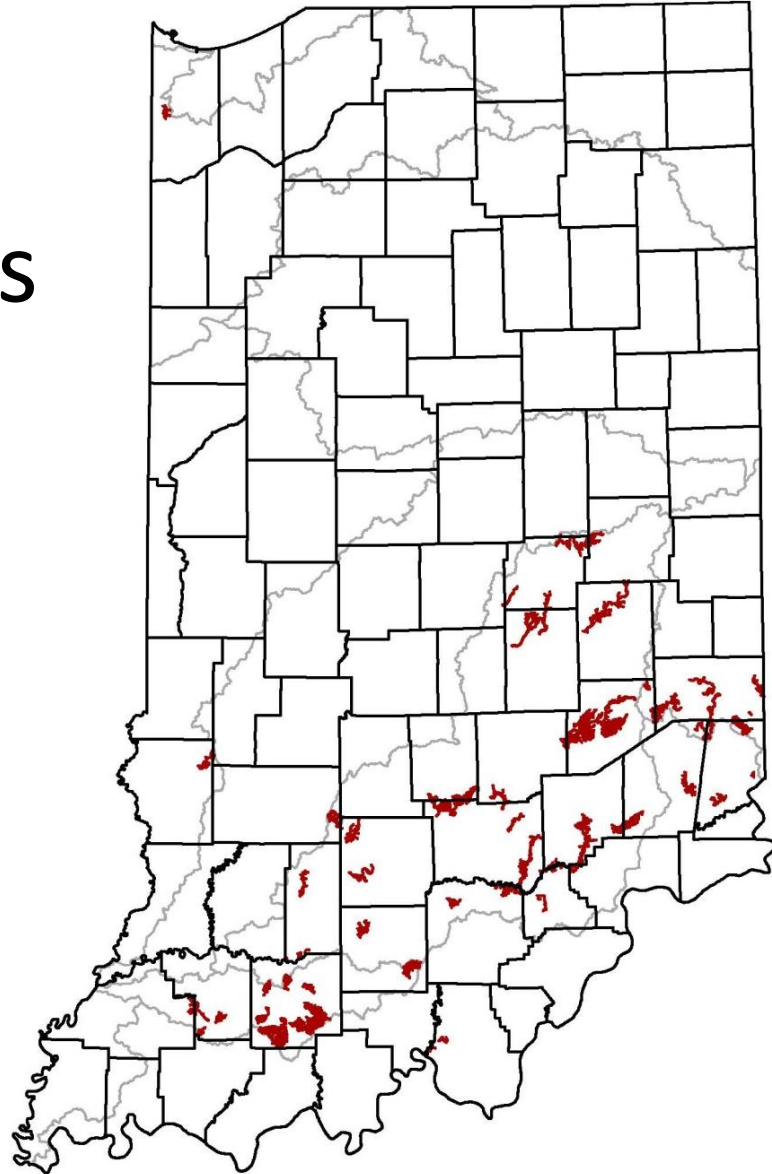




# Impairments Added to the 303(d) List

Impairments added to Category 5 based on new or revised assessments	119
Total Number of Additions	119

# Impairments Added to Indiana's Draft 2016 303(d) List

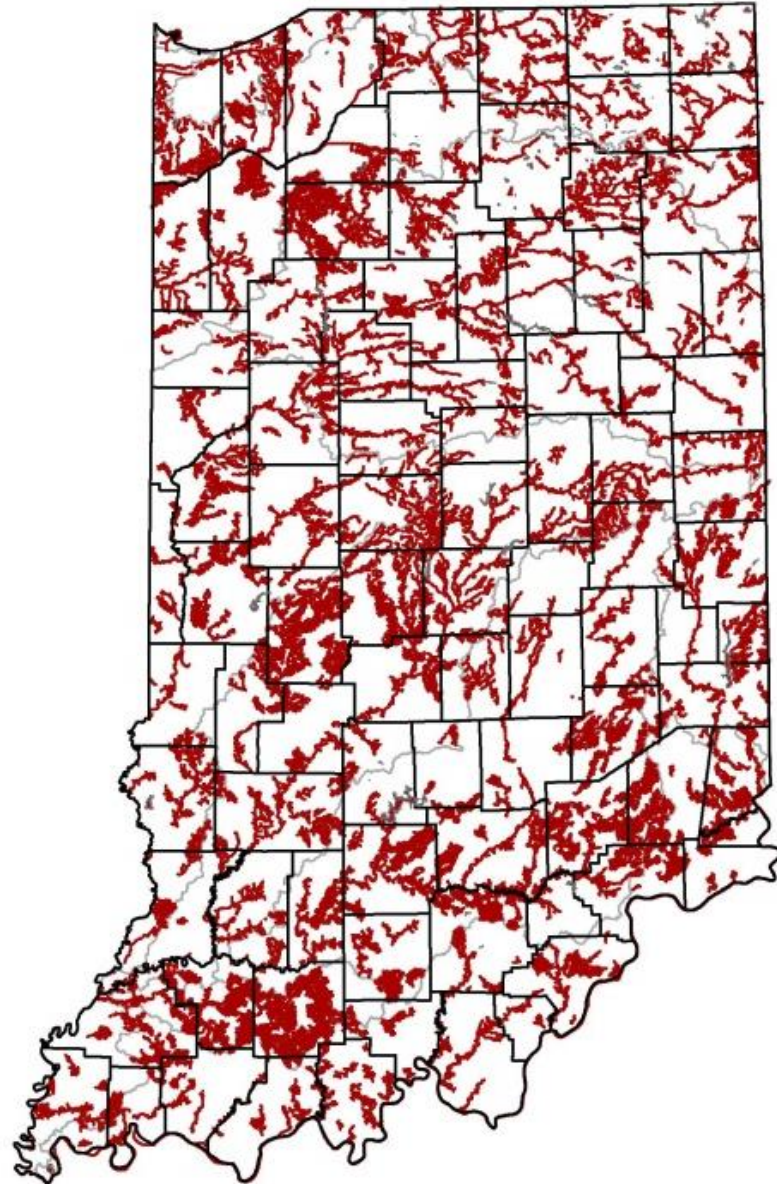




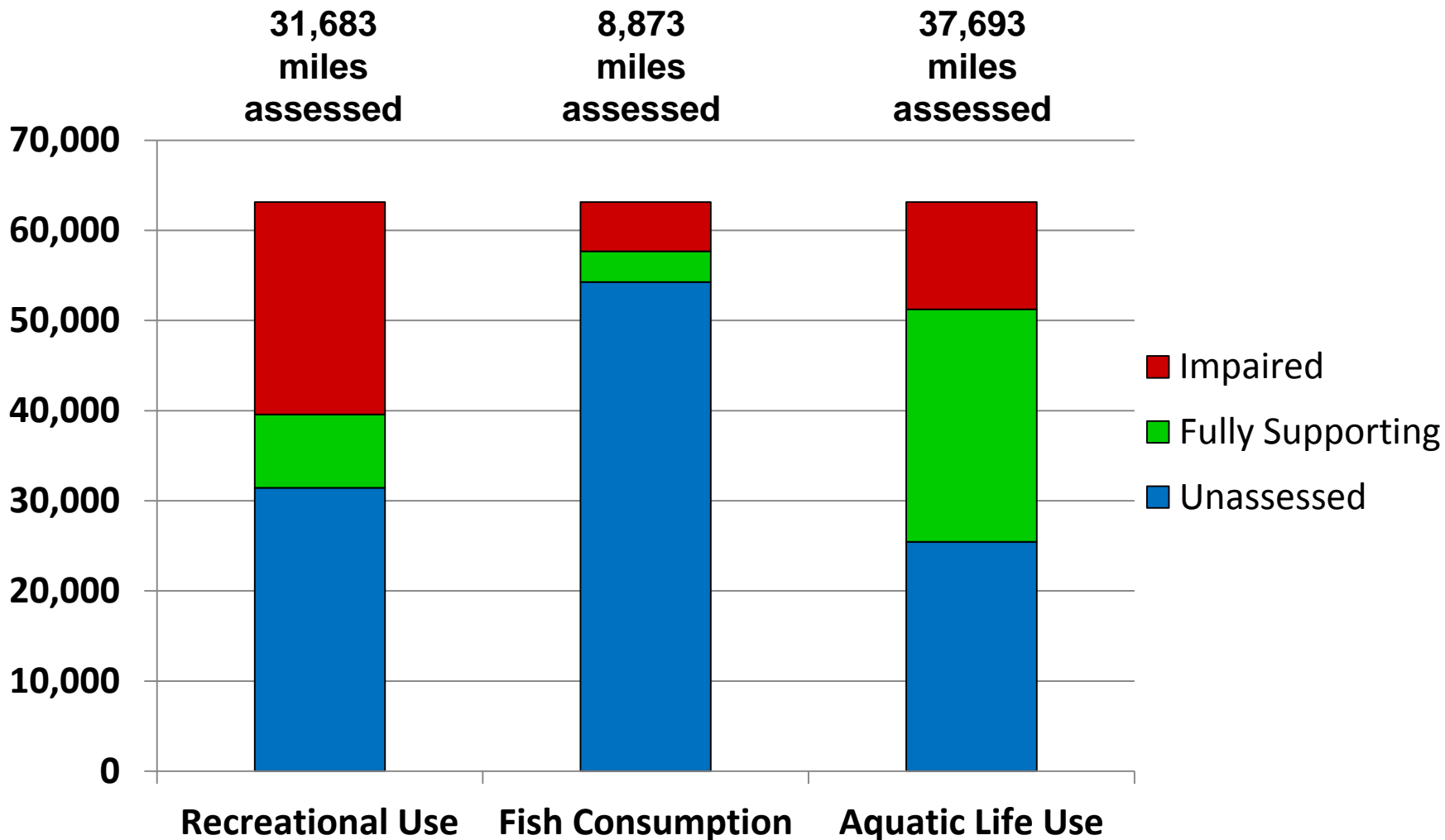
# Overall Changes to the 303(d) List Submitted to U.S. EPA on April 1, 2016

Impairments on the 2014 303(d) List	3,584
Delistings	(45)
Additions	119
Impairments on the Draft 2016 303(d) List	3,658

# All Impaired Waters on Indiana's Draft 2016 303(d) List



# Impairments by Use



# Additional Changes to be Submitted with the 2016 IR Addendum

- Possible changes might include:
  - Changes based on additional review of the 303(d) list as IDEM prepares its submittal package
  - Changes requested by U.S. EPA's review of the draft list
  - Changes based on information provided by the public during comment period

# The Public Comment Period for the Draft 303(d) List is Still Underway

- April 6 to July 5, 2016
- IDEM welcomes your comments on the 2016 Draft 303(d) List and the CALM used to develop it
- We're also looking for any data you might have to share



# Where to Find More Information

[www.idem.IN.gov/nps/2647.htm](http://www.idem.IN.gov/nps/2647.htm)

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